

## Low Range (0-3" to 0-8" WCD) Wet/Wet Differential Pressure Transmitter



### 377 (0-3" to 0-8" WCD) WET/WET DIFFERENTIAL PRESSURE TRANSMITTER

#### Features

- Single Diaphragm for Precision
- Fast response
- External Zero & Span Adjustments
- 500 PSI overpressure
- Shunt calibration circuit

#### Applications

- Leak testing
- Flow measurement
- Engine test stands
- Research
- High speed testing
- Unidirectional or Bidirectional

#### PERFORMANCE

Full Scale Pressure Ranges (FSPR)	0 -3, 0-8" WC
Combined Accuracy (Non-Linearity (BFSL), Hysteresis & Repeatability)	$\leq \pm 0.6\%$ RSS
Full Scale Output (FSO)	16.00 mA $\pm 1\%$ FSO @ 70°F
Resolution	Infinite
Zero Shift w/Line Pressure (%FSO/500 PSI)	$\leq \pm 2\%$
Zero Shift After 500 PSI Overload	Single Side $\leq \pm 0.5\%$ FSO Alternate Sides $\leq \pm 0.5\%$ FSO
Compensated Temperature Range	70°F to +170°F (21°C to 77°C)
Operating Temperature Range	0°F to +185°F (-20°C to +85°C)
Storage Temperature Range	-40°F to +185°F (-40°C to +85°C)
Thermal Effect on Zero	$\leq 2.0\%$ FSO per 100°F
Thermal Effect on Span	$\leq 2.0\%$ FSO per 100°F

#### ELECTRICAL

Supply Voltage	9-30 VDC
Power Supply Regulation	$\pm .02\%$ FSO per volt (Typical)
Output Signal	4-20 mA
Load Impedance	1000 ohms maximum @ 30 VDC decreasing linearly to 0 ohms @ 9 VDC
Zero Adjustment	$\pm 5\%$ FSO min./ $\pm 50\%$ FSO max.
Span Adjustment	$\pm 5\%$ FSO min./ $\pm 50\%$ FSO max.
Range Calibration Signal	80% FSO $\pm 10\%$ by shorting pins C&D
Calibration Signal Accuracy	$\leq \pm 1.0\%$
Circuit Protection	Reverse polarity protected
Insulation Resistance	< 5 nS to case ground
Standard Electrical Connection	Mates with 6 pin, Hermetic, Box Mount, Shell Size 10, MIL-C-26482 bendix type connector
Pin Outs	Pin A + Signal / Power Pin B - Signal / Power Pin C Shunt Cal Pin D Shunt Cal Pin E No Connection Pin F No Connection

# MODEL 377 Low Range Differential Pressure Transmitter



## The Value of Viatran to Your Operation

- Viatran value is measured in maximum reliability and minimal repair, unlike products that result in less durability and more downtime for replacement. Viatran value is worth your investment for the long run:

### ♦ PRODUCTS

50 years of proven solutions

### ♦ TECHNICAL SUPPORT

Expert problem solvers

### ♦ CUSTOMER SERVICE

Fast, friendly and honest

## MECHANICAL

Standard Pressure Port	1/4" NPT Female
Line Pressure	500 PSI maximum
Proof Pressure	500 PSI single sided
Burst Pressure	1100 PSI
Volume Displacement	0.1 mL at FSPR
Pressure Cavity Volume	
Standard Flanges:	< 0.4 cubic inches, each side
Optional Process Flanges "NB":	1.5 cubic inches
Mounting	May be supported by process piping or by optional mounting bracket.
Response Time	Consult Engineering

## MATERIALS OF CONSTRUCTION

Wetted Materials	316 stainless steel and Viton O-Ring
Enclosure Material	304 and 316 stainless steel
Identification	Laser marked on body of unit
Weight	3.5 lbs. (6.5 lbs. with optional flanges)

## OPTIONS

B( )	Alternate electrical connector
DG	Improved temperature compensation
DH	Special Range
DK	Special calibration setting
DW	No external adjustments
EA	Special Calibration Run
GE	Buna 'N' O-Rings
NB	Alternate process flanges
NH	Customer specific identification
PW	Calibration of Meter w/Viatran unit
Y( )	Alternate pressure ports
Z()	Alternate electrical connector

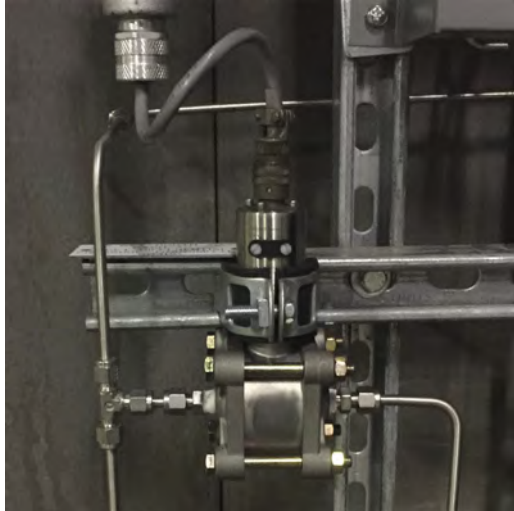
*Note: Application of some available options may affect standard performance. Consult Viatran Application Engineers for details.*

*Information is accurate to the best of Viatran's knowledge. We reserve the right to change specifications at any time. Please contact Viatran for specific order inquiries.*

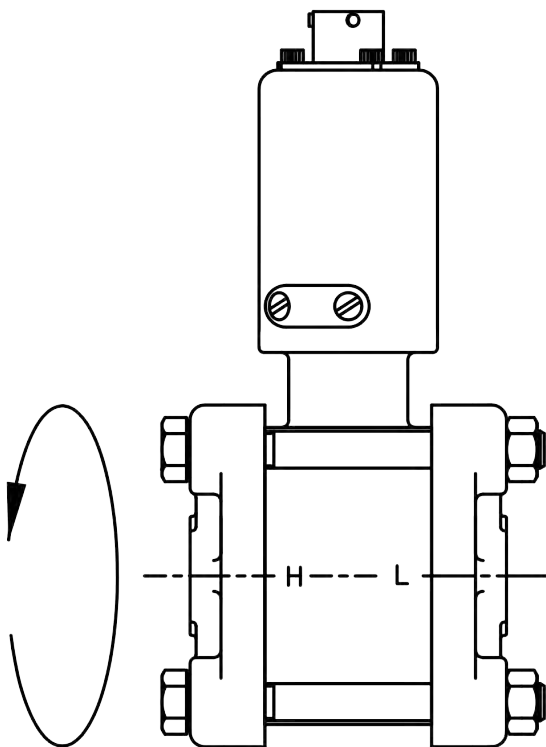


# MODEL 377 Solutions custom-fit to your application

## MOUNTING

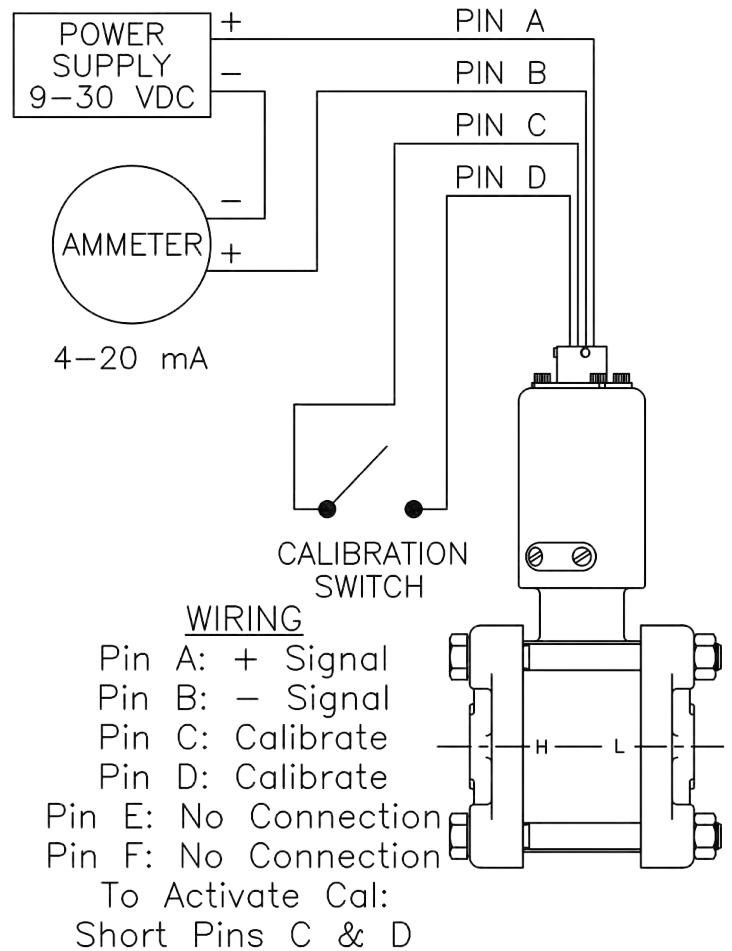


Example of Model 377 mounted in spray booth application.



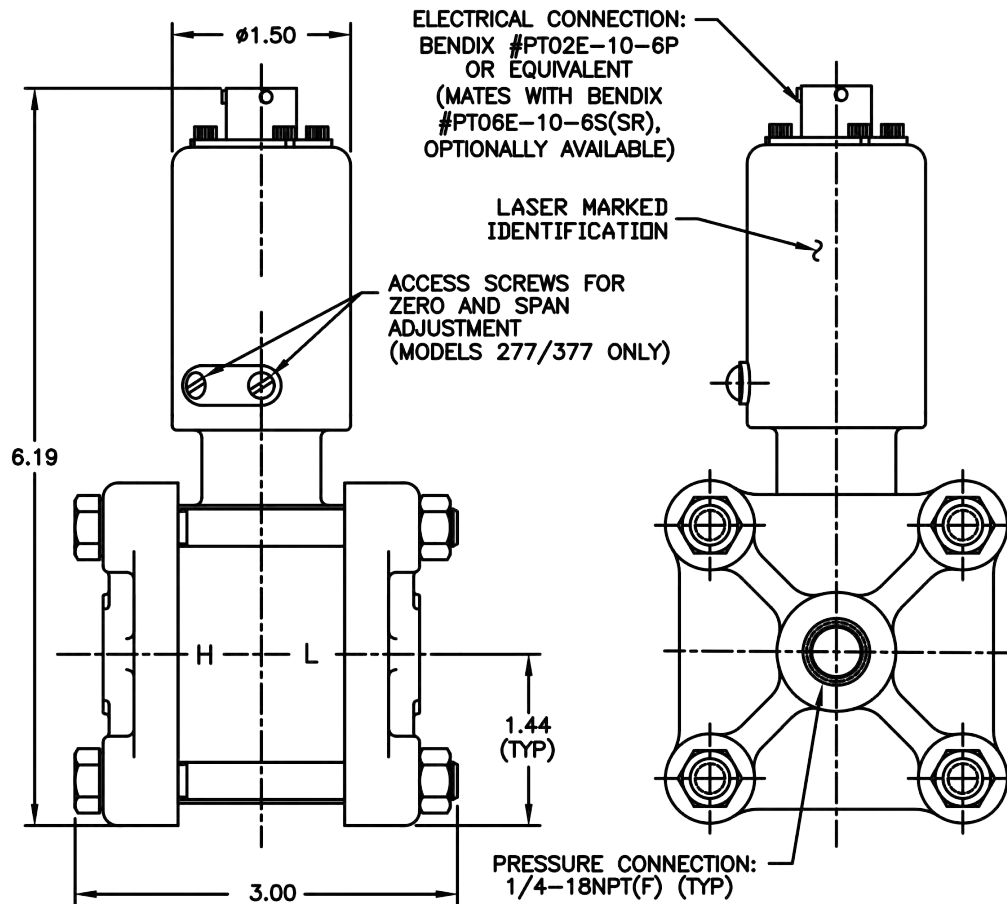
Due to the effects of gravity on the oil fill of the sensor, it's recommended that the product be mounted as shown

## WIRING CONNECTIONS



# MODEL 377 Low Range Differential Pressure Transmitter

## DIMENSIONAL DATA



## ACCESSORIES

Mounting Brackets  
Digital Indicator  
Panel Meter  
Mating Electrical Cable Assembly



  
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